AIMA-RFSW

- **Plug-and-play AIMA3000 platform module**

- **Forward-path version (5 MHz to 1000 MHz) suits CENELEC and NTSC up to 127 channels (both analogue and digital)**

- **High reliability, compact design**

- **Operates in AUTO or MANUAL mode**

- **Operator defined adjustable thresholds for both inputs with the maximum and minimum signal parameters**

- **Comprehensive remote monitoring**

- **Configurable alarm threshold levels**

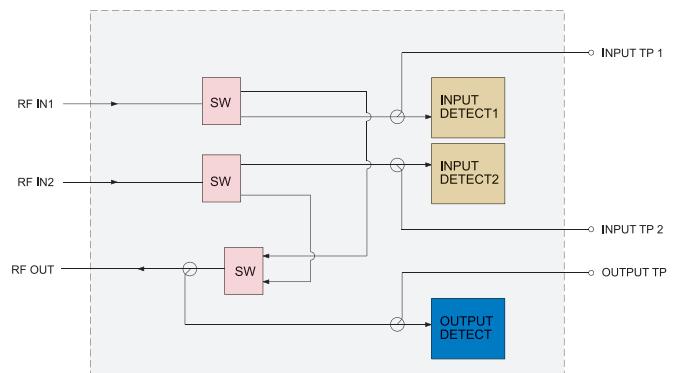- **Fully FCC, CE, and RCM compliant**

Overview

The RF A/B Protection Switch (RFSW) is designed to plug into the latest generation Advanced Intelligent Multi-services Access platform - the AIMA3000.

Providing reliable radio signal stability, the RFSW is an RF-based switching device designed for automatic or manual switching of radio signals. It maintains the RF output in the event of a loss or degraded signal of one of the two signals connected to its inputs.

Engineered for high-isolation, the impedance-matched RF switch relay, is controlled by microcontroller-based logic circuits. This intelligent microcontroller manages the switch based on the detection of RF input signal levels. In addition, the switch can operate based on user-defined minimum and maximum RF threshold levels. The RFSW switching module provides self-monitoring and communicates with the ASMM (AIMA3000 System Management Module) within the AIMA3000 chassis.

Block diagram

Specifications

RF Performance

RF bandwidth	5 MHz to 1000 MHz
RF flatness	± 0.5 dB (45 MHz to 1000 MHz)
Insertion loss	2 dB maximum
Isolation	65 dB
RF impedance	75 Ω
RF return loss	> 16 dB
RF test point relative to RF output port	-20 dB ± 1 dB
RF connectors	3 x GSK-type female
RF test points	3 x Mini-SMB
Switching time	< 15 ms
Alarms and status	Front-panel LEDs, SNMP Traps

General

Power supply	Powered via AIMA3000 backplane
Power consumption	< 0.1 W
Operating temperature	-5 oC to +55 oC
Storage temperature	-25 oC to +70 oC
Dimensions (WxDxH)	24.6 x 410 x 152.5 mm
Weight	0.88 kg